

4.2.B. 0511000204.

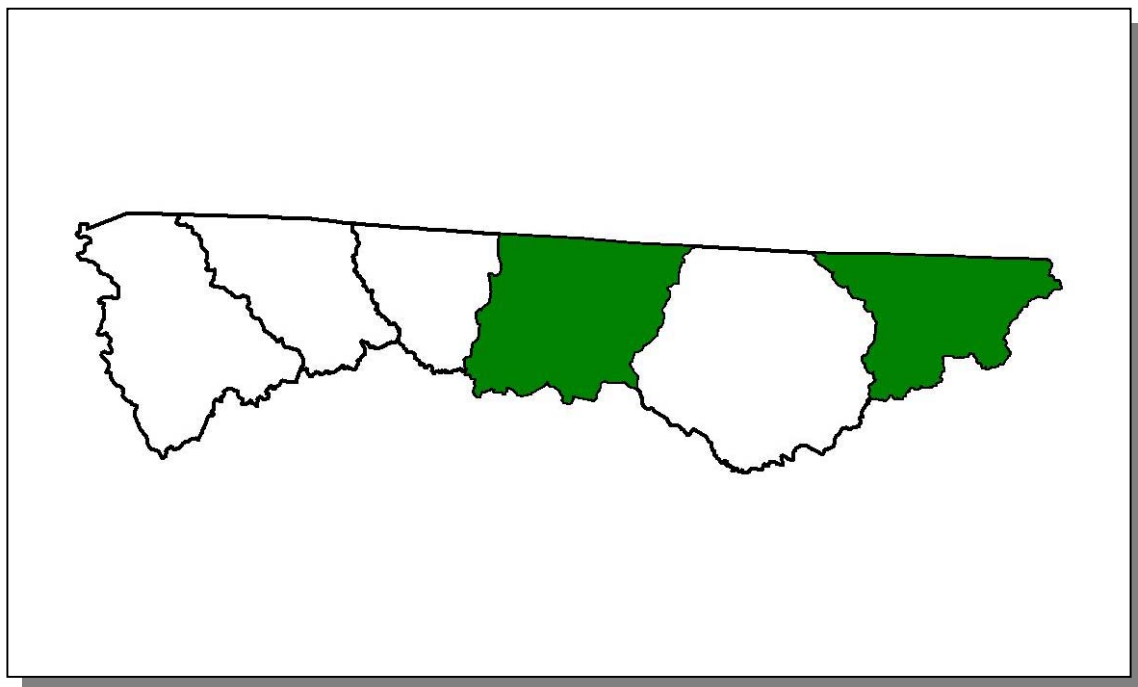


Figure 4-23. Location of Subwatershed 0511000204. All Barren River HUC-10 subwatershed boundaries are shown for reference.

4.2.B.i. 051100020403 (Treeline Creek).

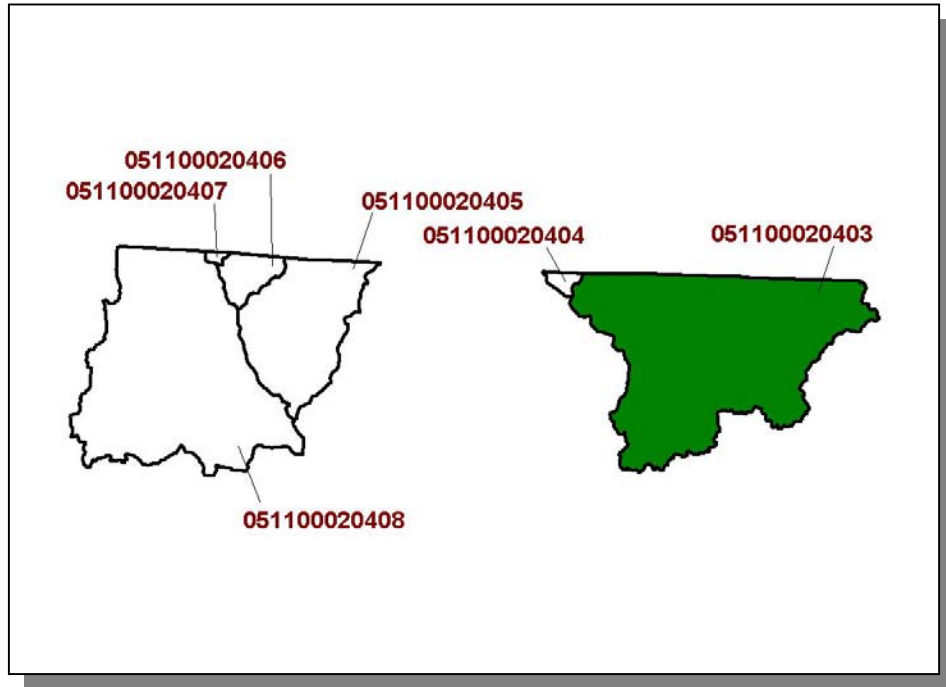


Figure 4-24. Location of Subwatershed 051100020403. All Barren River HUC-12 subwatershed boundaries are shown for reference.

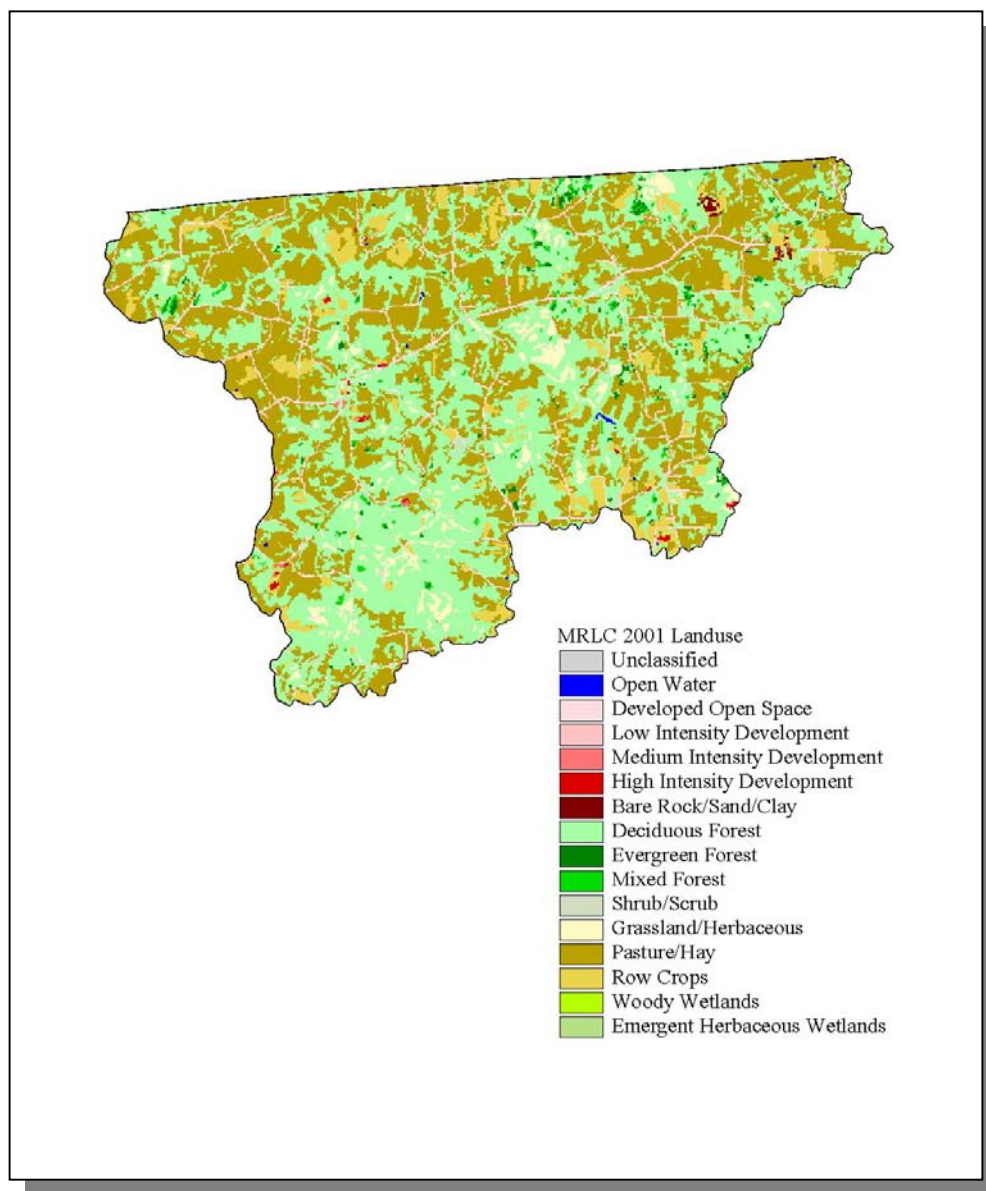


Figure 4-25. Illustration of Land Use Distribution in Subwatershed 051100020403.

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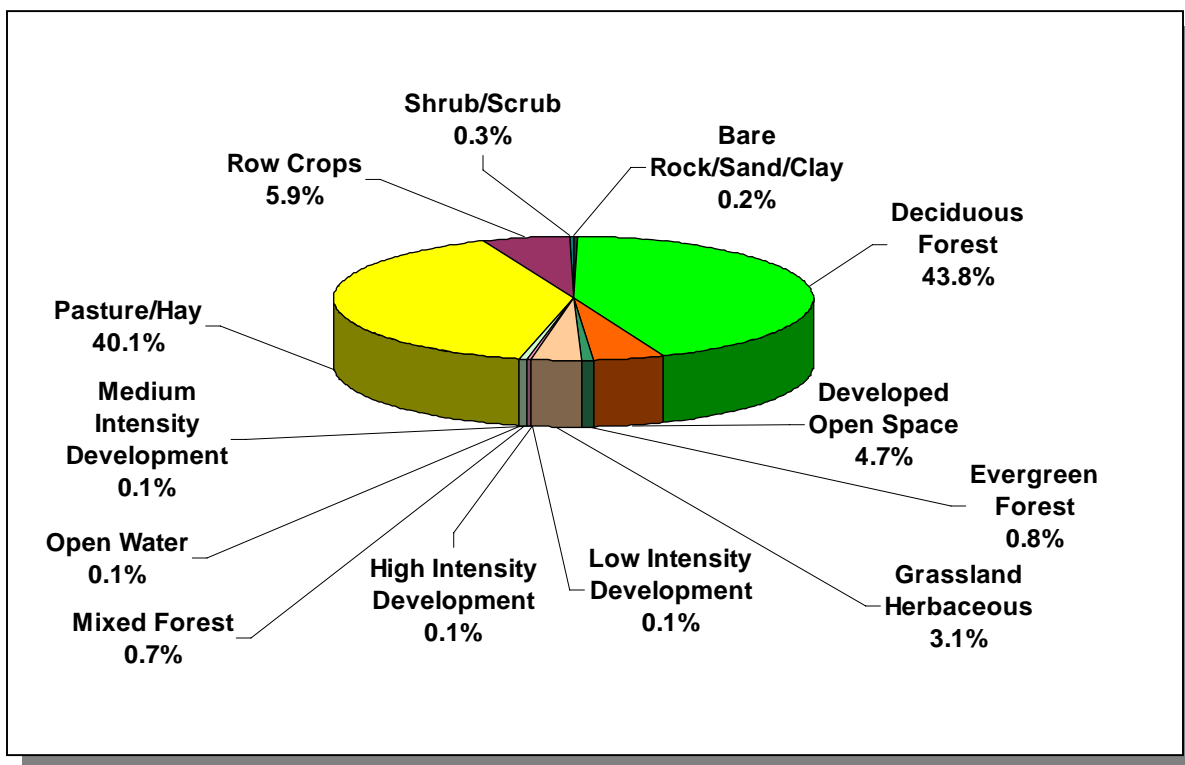


Figure 4-26. Land Use Distribution in Subwatershed 051100020403. More information is provided in Appendix IV.

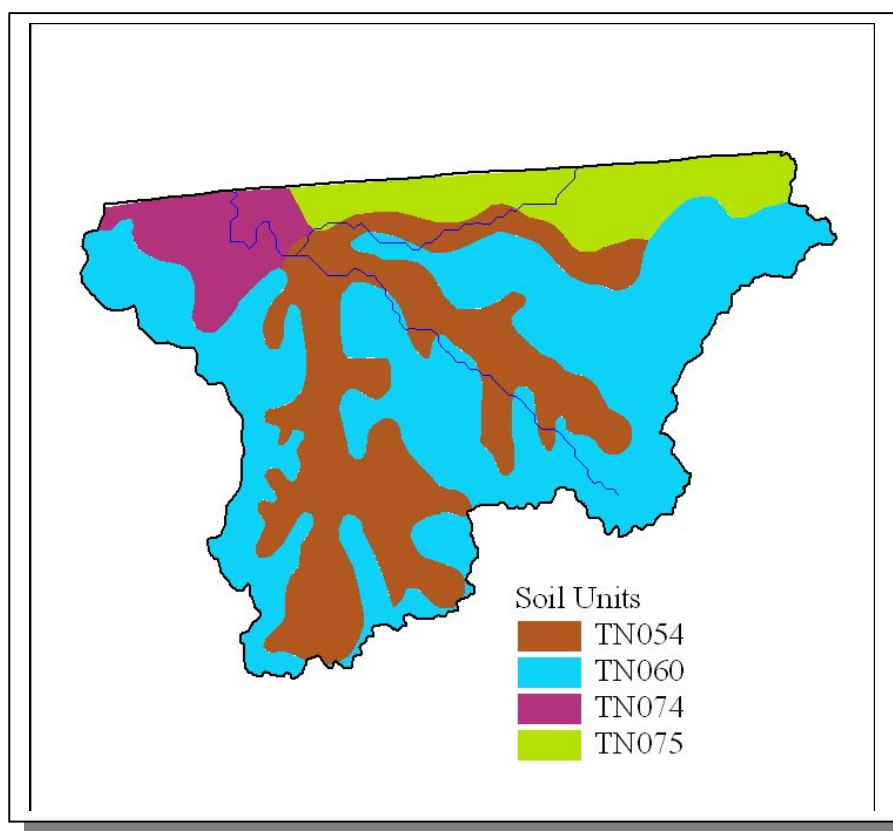


Figure 4-27. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020403.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN074	7.00	B	1.55	4.94	Loam	0.33
TN075	0.00	B	1.33	5.24	Loam	0.31

Table 4-19. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020403. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Clay	7,238	7,311	7,976	19.4	1,404	1,418	1,547	10.2
Macon	15,906	17,854	20,386	2.89	459	515	588	28.1
Totals	23,144	25,165	28,362		1,863	1,933	2,135	14.6

Table 4-20. Population Estimates in Subwatershed 051100020403.

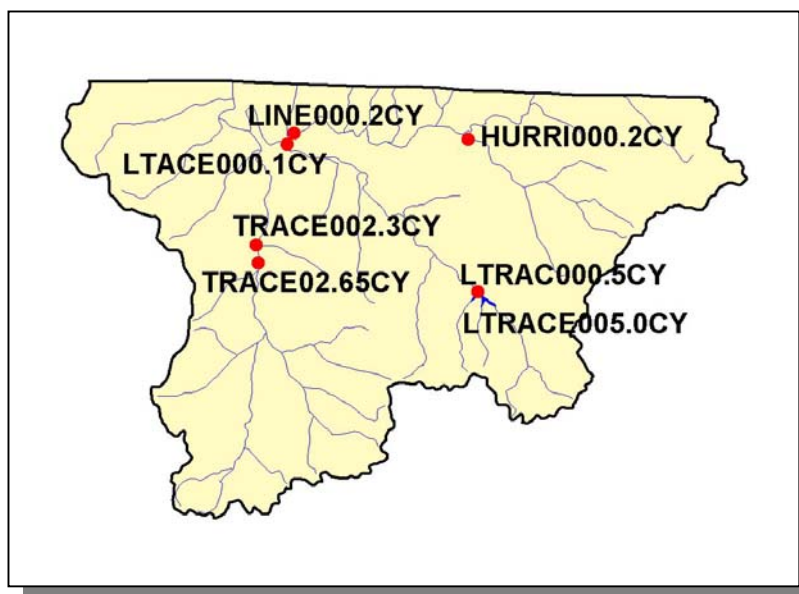


Figure 4-28. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051100020403. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.B.i.a. Point Source Contributions.

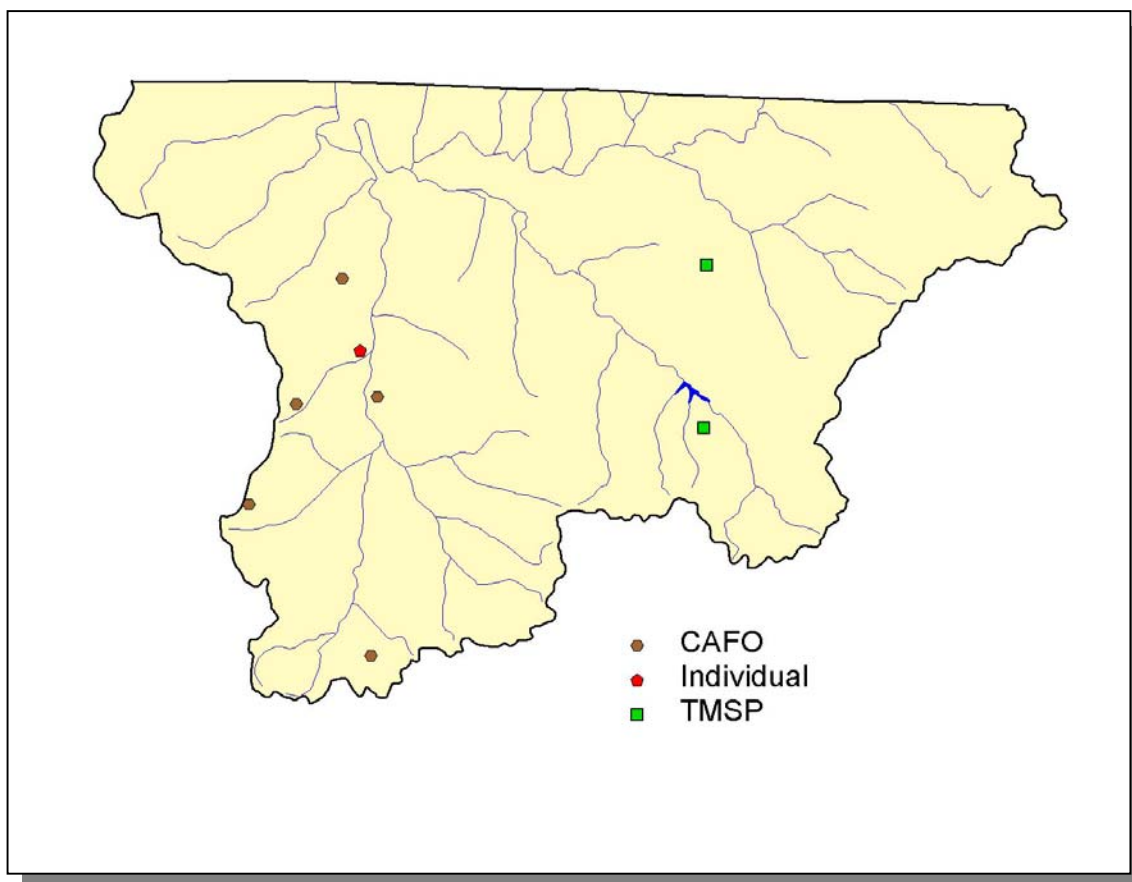


Figure 4-29. Location of Permits Issued in Subwatershed 05110020403. More information, including the names of facilities, is provided in Appendix IV.

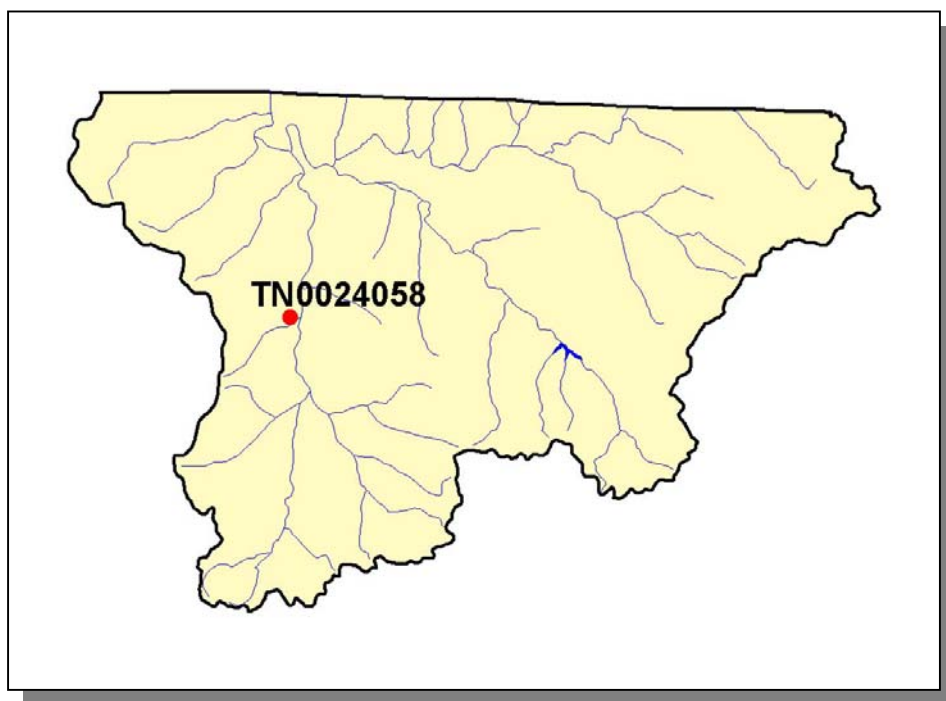


Figure 4-30. Location of Active NPDES Sites in Subwatershed 051100020403. More information, including the names of facilities, is provided in Appendix IV.

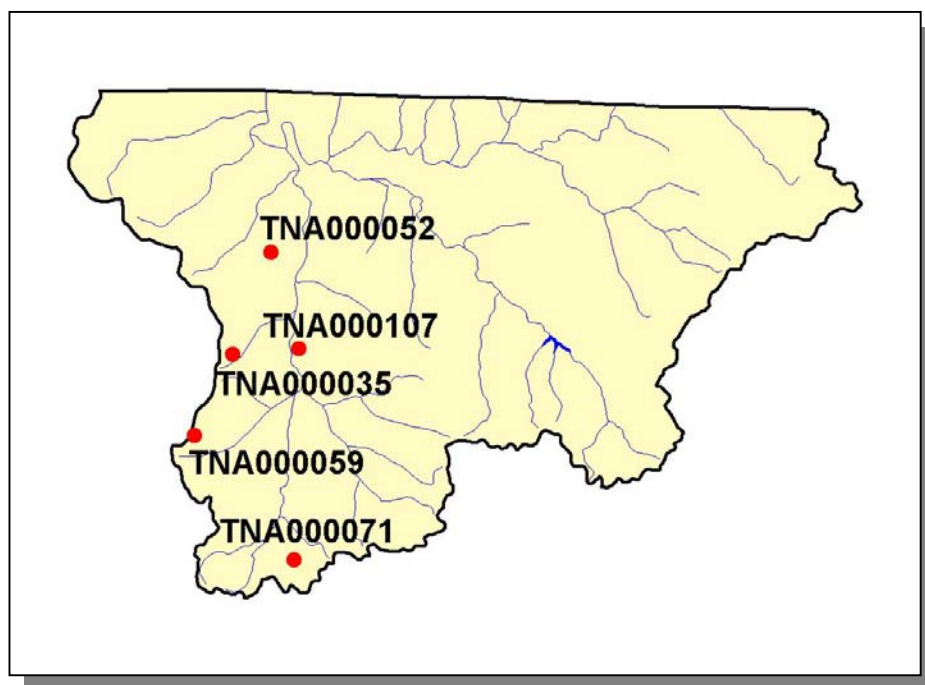


Figure 4-31. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 051100020403. More information, including the names of facilities, is provided in Appendix IV.

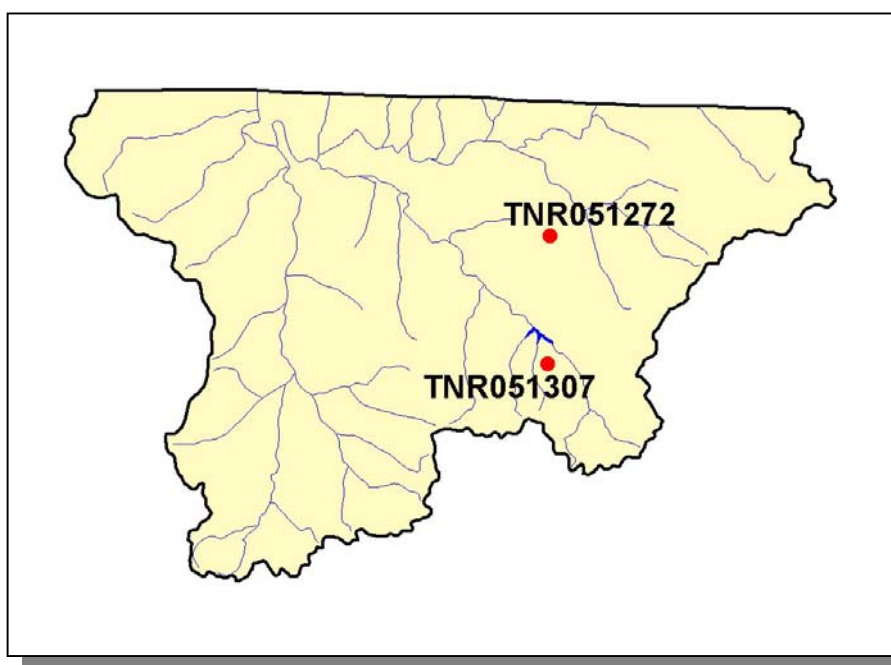


Figure 4-32. Location of TMSP Sites in Subwatershed 051100020403. More information, including the names of facilities, is provided in Appendix IV.

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4.2.B.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
686	10,525	15	13	220	20

Table 4-21. Summary of Livestock Count Estimates in Subwatershed 051100020403. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Clay	0	14,574	0	18	174	23
Macon	15,039	26,098	318	675	2,377	111

Table 4-22. Summary of Livestock Count Estimates in Clay and Macon Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Clay	105.1	105.1	2.3	10.1
Macon				

Table 4-23. Forest Acreage and Annual Removal Rates (1987-1994) in Subwatershed 051100020403.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.07
Grass (Pastureland)	1.04
Grass (Hayland)	0.37
Legume (Hayland)	0.13
Legumes, Grass (Hayland)	0.47
Grass, Forbs, Legumes (Mixed Pasture)	1.33
Corn (Row Crops)	3.99
Tobacco (Row Crops)	26.08
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crop	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	1.36

Table 4-24. Annual Estimated Total Soil Loss in Subwatershed 051100020403.

4.2.B.ii. 051100020404 (Barren River).

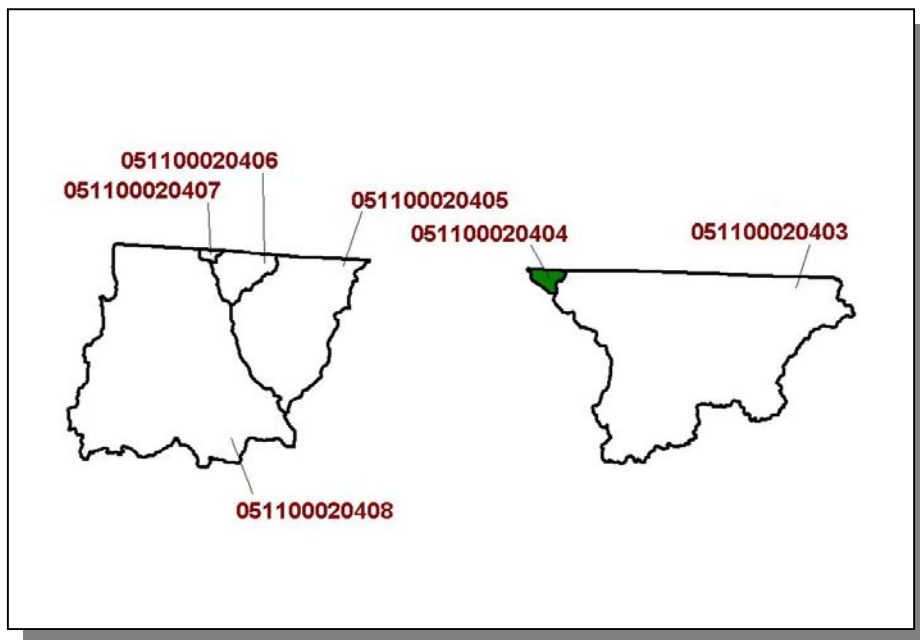


Figure 4-33. Location of Subwatershed 051100020404. All Barren River HUC-12 subwatershed boundaries are shown for reference.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Macon	15,906	17,854	20,386	0.58	92	103	118	28.3

Table 4-25. Population Estimates in Subwatershed 051100020404.

4.2.B.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.ii.b. Nonpoint Source Contributions.

There are known nonpoint source contributions in this subwatershed.

4.2.B.iii. 051100020405 (Puncheon Creek).

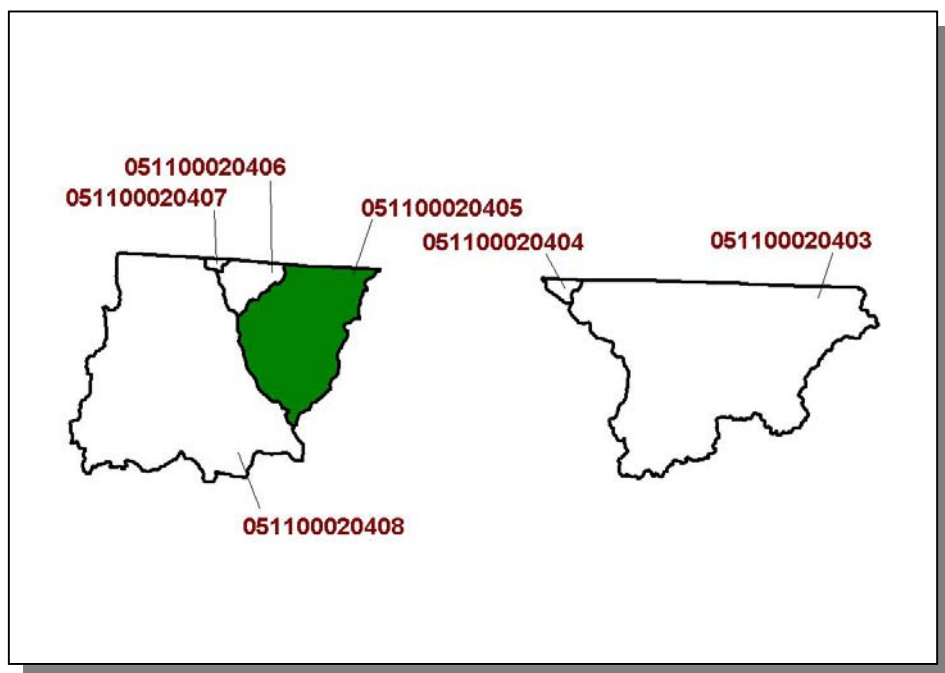


Figure 4-34. Location of Subwatershed 051100020405. All Barren River HUC-12 subwatershed boundaries are shown for reference.

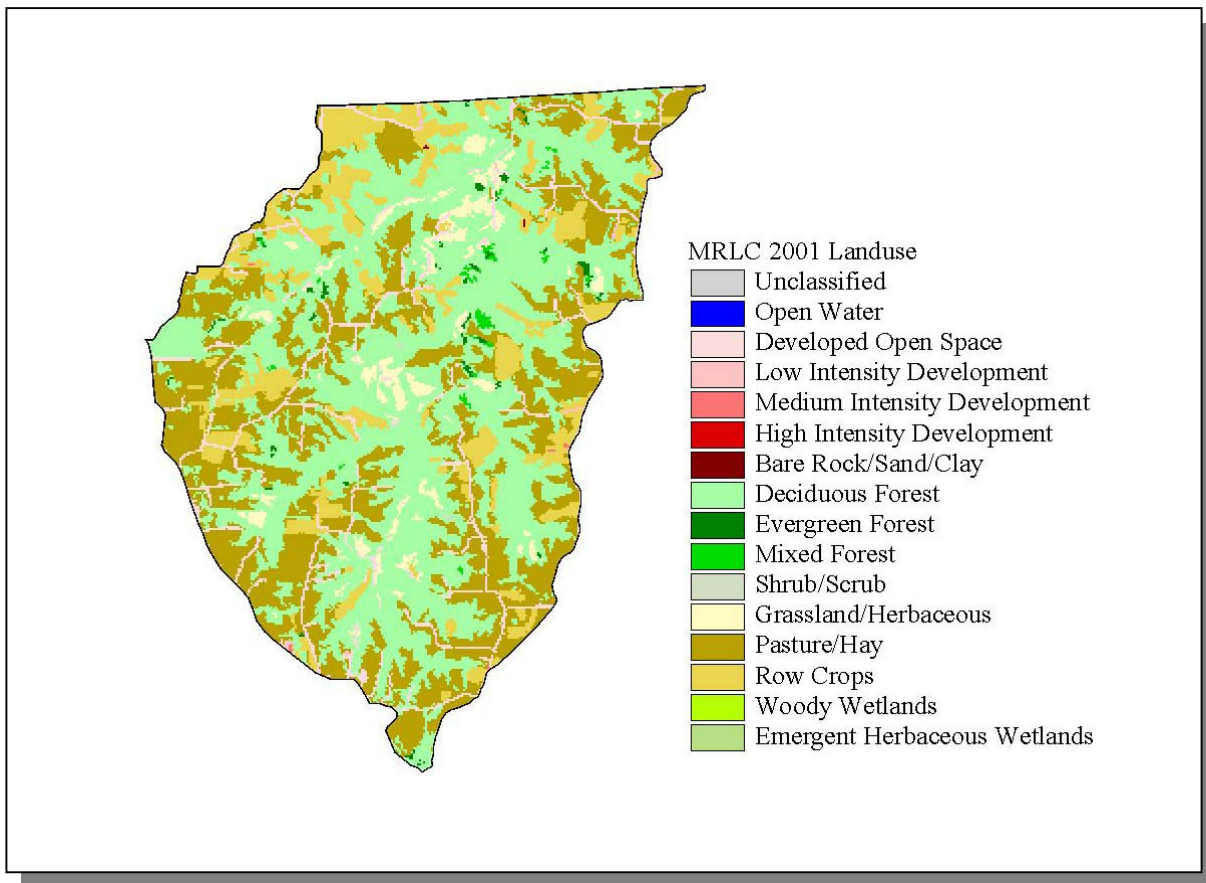


Figure 4-35. Land Use Distribution in Subwatershed 051100020405.

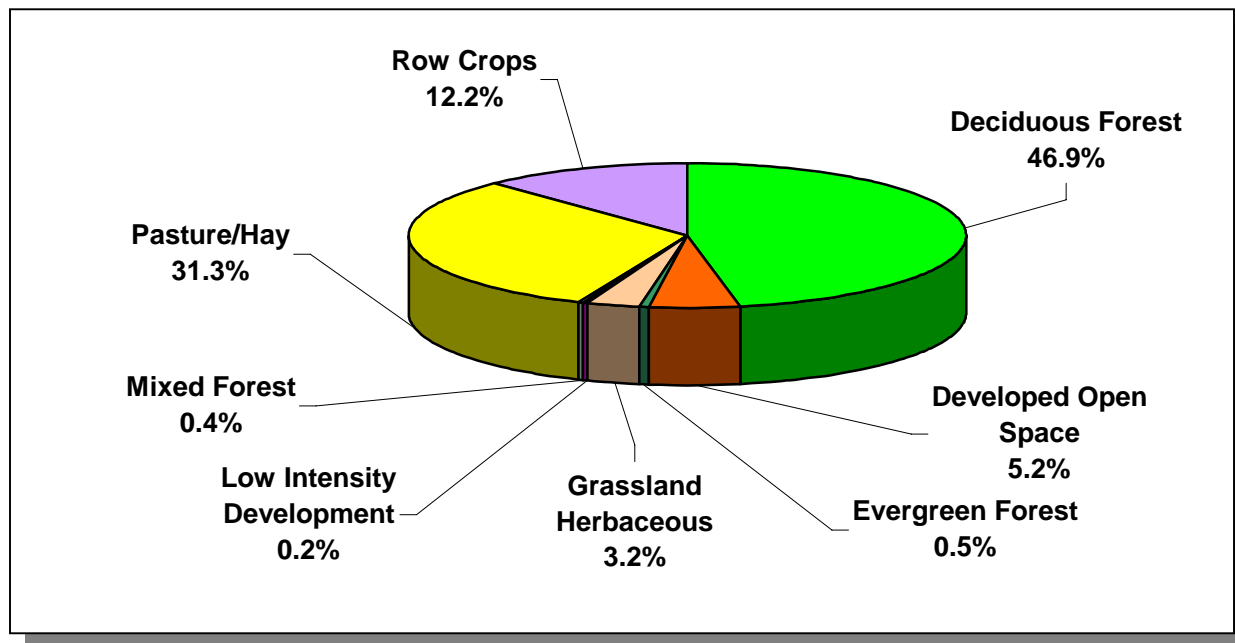


Figure 4-36. Land Use Distribution in Subwatershed 051100020405.

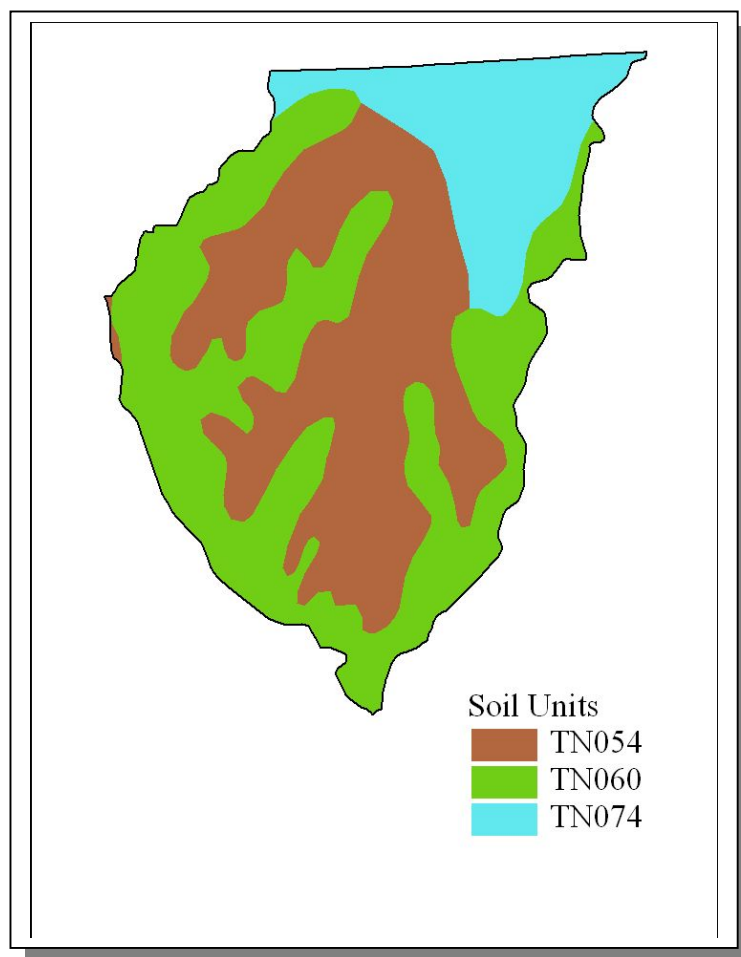


Figure 4-37. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020405.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	1.38	Loam	0.32
TN060	5.00	B	1.30	1.37	Silty Loam	0.39
TN074	7.00	B	1.44	1.36	Loam	0.33

Table 4-26. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020405. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Macon	15,906	17,854	20,386	6.08	967	1,085	1,239	28.1

Table 4-27. Population Estimates in Subwatershed 051100020405.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Lafayette	Macon	3,641	1,695	1,323	348	24

Table 4-28. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051100020405.



Figure 4-38. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051100020405. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.B.iii.a. Point Source Contributions.

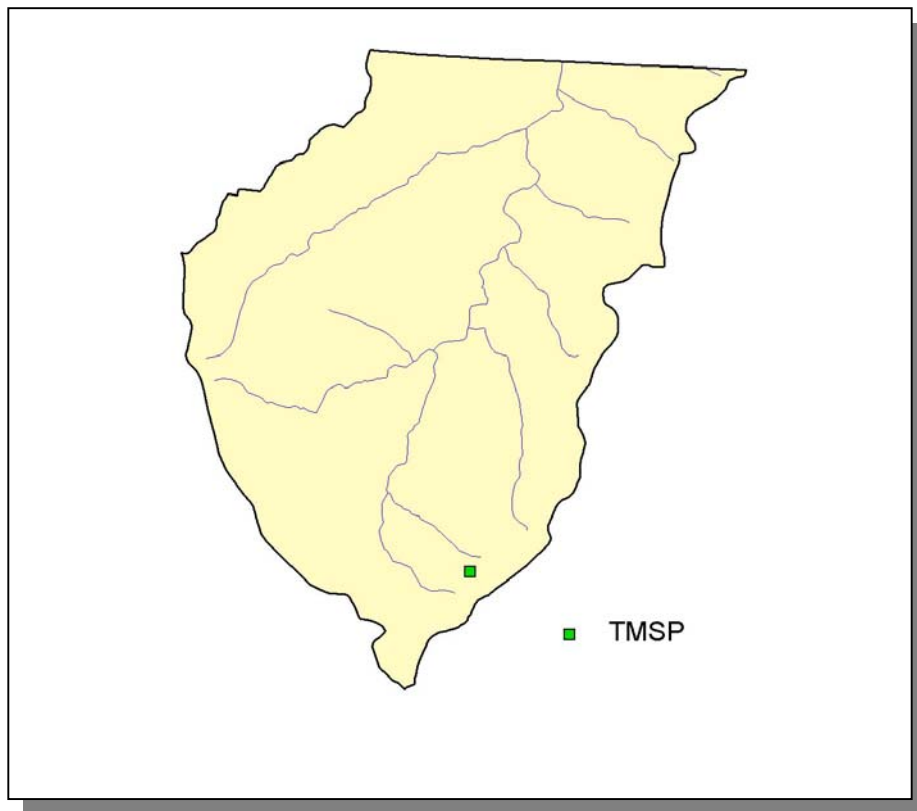


Figure 4-39. Location of Permits Issued in Subwatershed 051100020405. More information, including the names of facilities, is provided in Appendix IV.

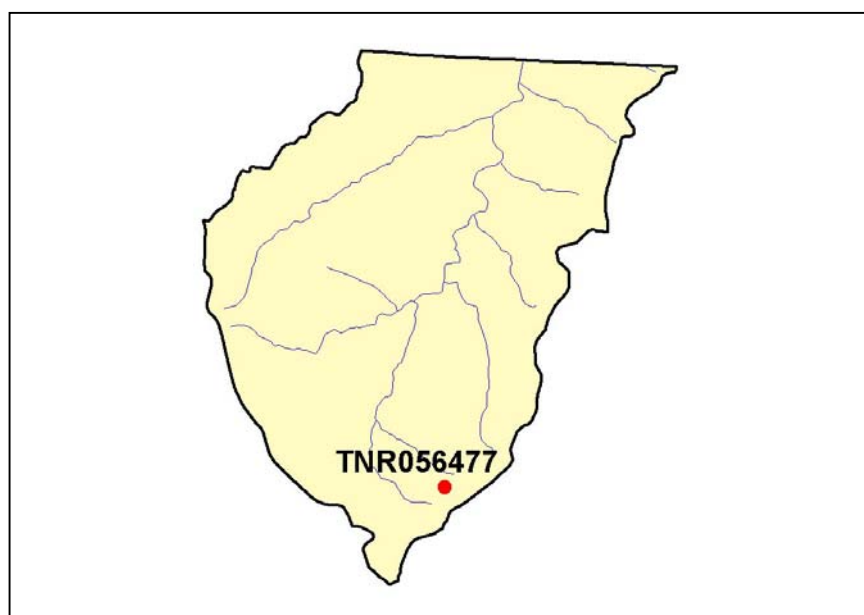


Figure 4-40. Location of TMSF Sites in Subwatershed 051100020405. More information, including the names of facilities, is provided in Appendix IV.

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4.2.B.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
1,185	2,056	25	3	187	9

Table 4-29. Summary of Livestock Count Estimates in Subwatershed 051100020405. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Macon	15,039	26,098	318	675	2,377	111

Table 4-30. Summary of Livestock Count Estimates in Macon County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)
Macon			

Table 4-31. Forest Acreage and Annual Removal Rates (1987-1994) in Macon County.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.07
Grass (Pastureland)	0.43
Grass (Hayland)	0.21
Legumes (Hayland)	0.13
Legumes, Grass (Hayland)	0.14
Grass, Forbs, Legumes (Mixed Pasture)	1.03
Corn (Row Crops)	3.99
Tobacco (Row Crops)	11.12
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crop	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.16

Table 4-32. Annual Estimated Total Soil Loss in Subwatershed 051100020405.

4.2.B.iv. 051100020406 (Pinchgut Creek).

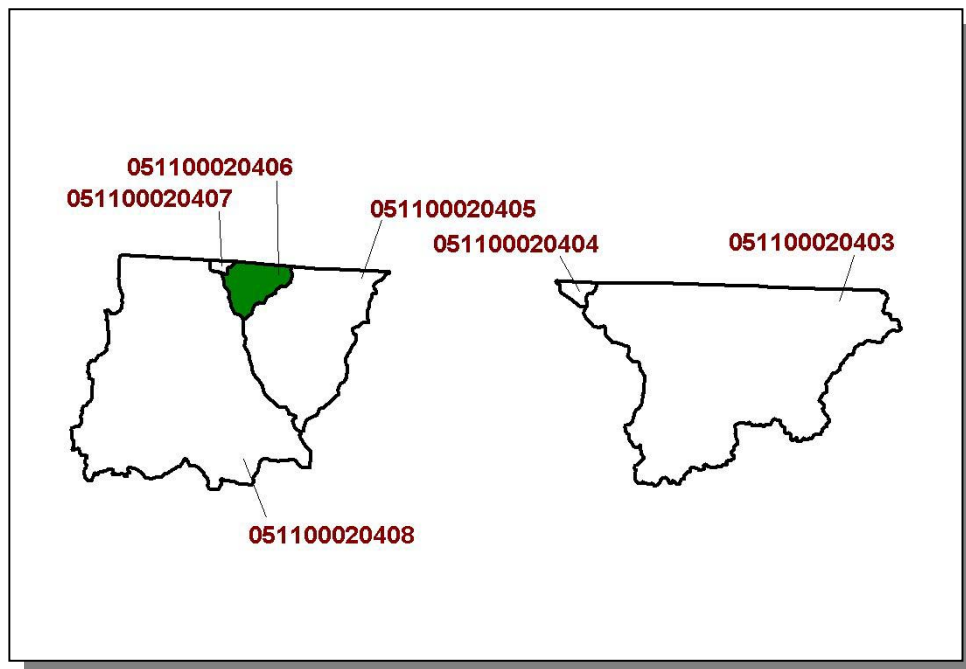


Figure 4-41. Location of Subwatershed 051100020406. All Barren River HUC-12 subwatershed boundaries are shown for reference.

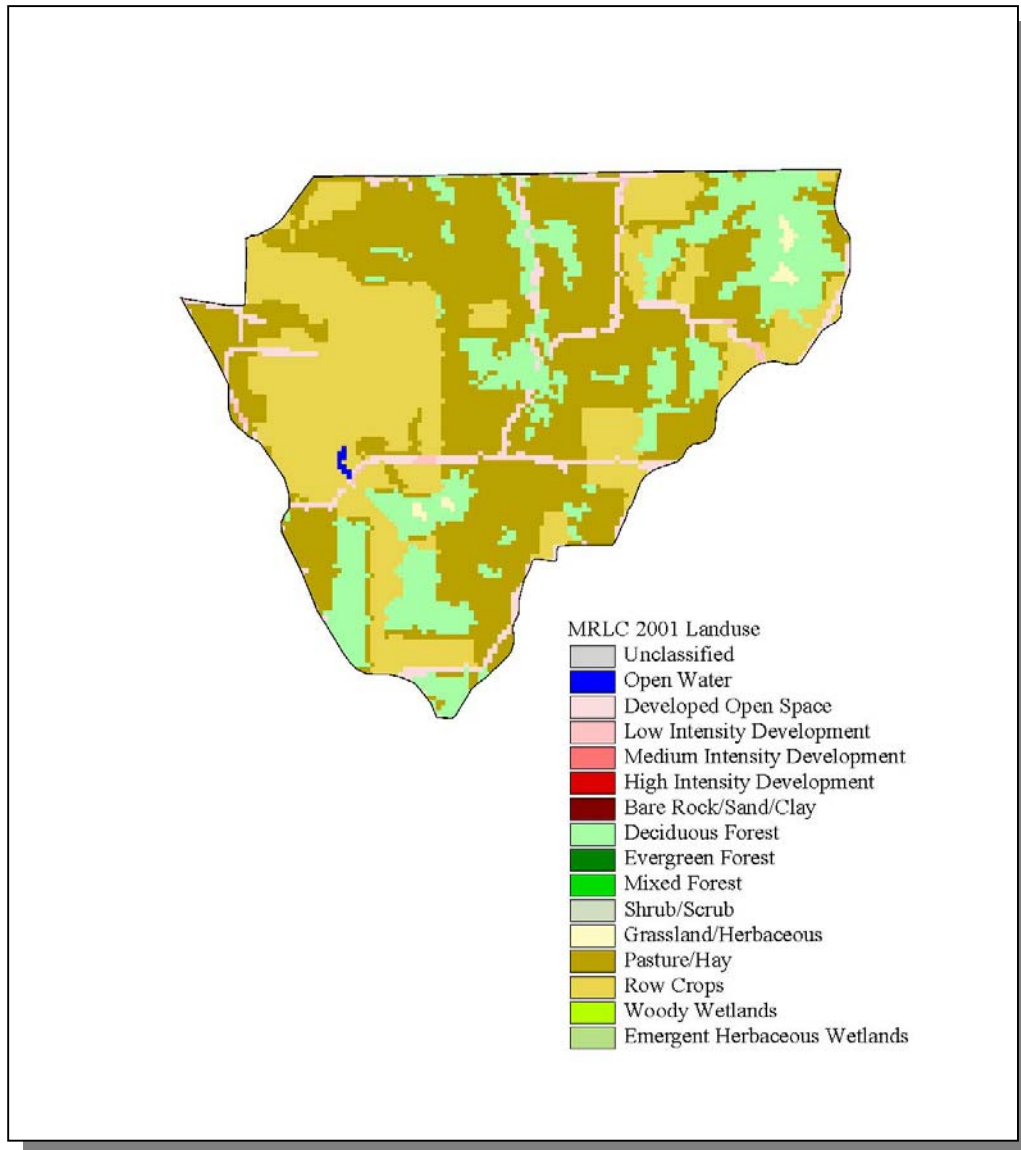


Figure 4-42. Illustration of Land Use Distribution in Subwatershed 051100020406.

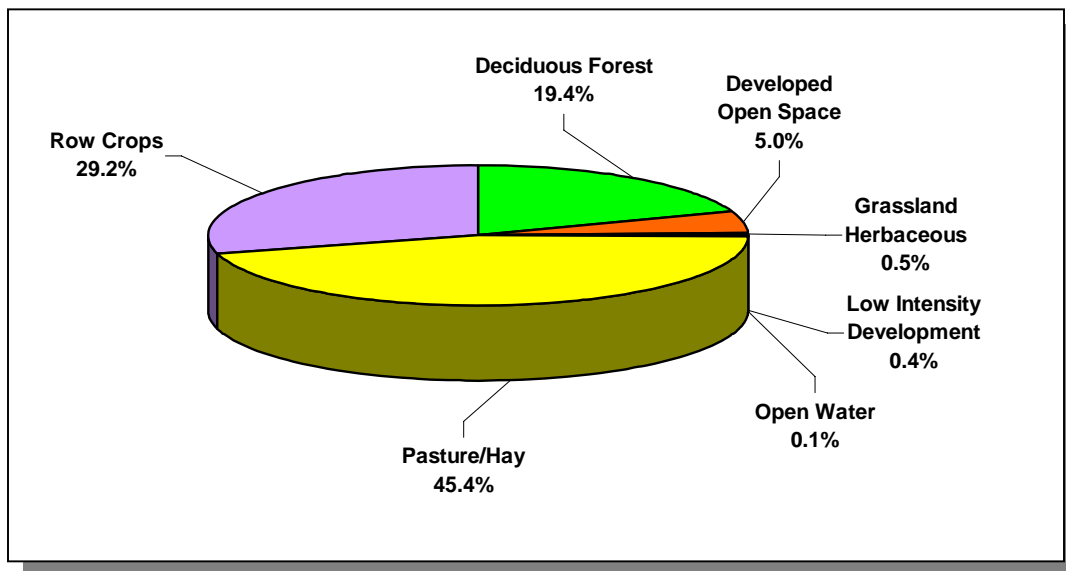


Figure 4-43. Land Use Distribution in Subwatershed 051100020406. More information is provided in Appendix IV.

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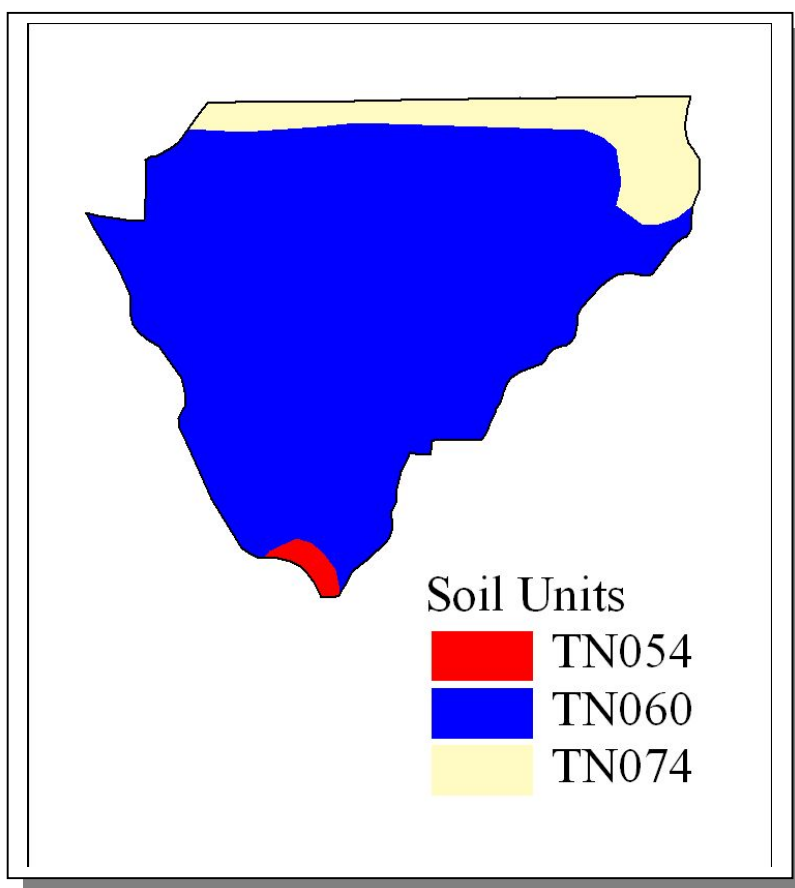


Figure 4-44. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020406.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN074	7.00	B	1.44	4.94	Loam	0.33

Table 4-33. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020406. The definition of “Hydrologic Group” is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Macon	15,906	17,854	20,386	1.41	235	264	302	28.5

Table 4-34. Population Estimates in Subwatershed 051100020406.

4.2.B.iv.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
345	599	7	<5	55	3

Table 4-35. Summary of Livestock Count Estimates in Subwatershed 051100020406. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Macon	15,039	26,098	318	675	2,377	111

Table 4-36. Summary of Livestock Count Estimates in Macon County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Macon				

Table 4-37. Forest Acreage and Annual Removal Rates (1987-1994) in Macon County.

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CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.07
Grass (Pastureland)	0.43
Grass (Hayland)	0.21
Legumes (Hayland)	0.13
Legumes, Grass (Hayland)	0.14
Grass, Forbs, Legumes (Mixed Pasture)	1.03
Corn (Row Crops)	3.99
Tobacco (Row Crops)	11.12
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crop	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.16

Table 4-38. Annual Estimated Total Soil Loss in Subwatershed 051100020406.

4.2.B.v. 051100020407 (Long Hungry Creek).

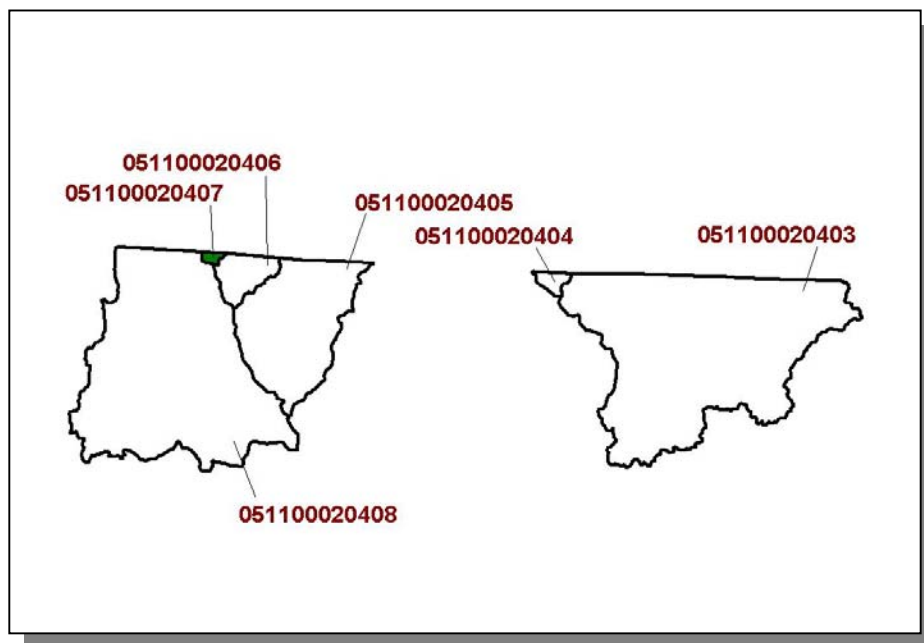


Figure 4-45. Location of Subwatershed 051100020407. All Barren River HUC-12 subwatershed boundaries are shown for reference.

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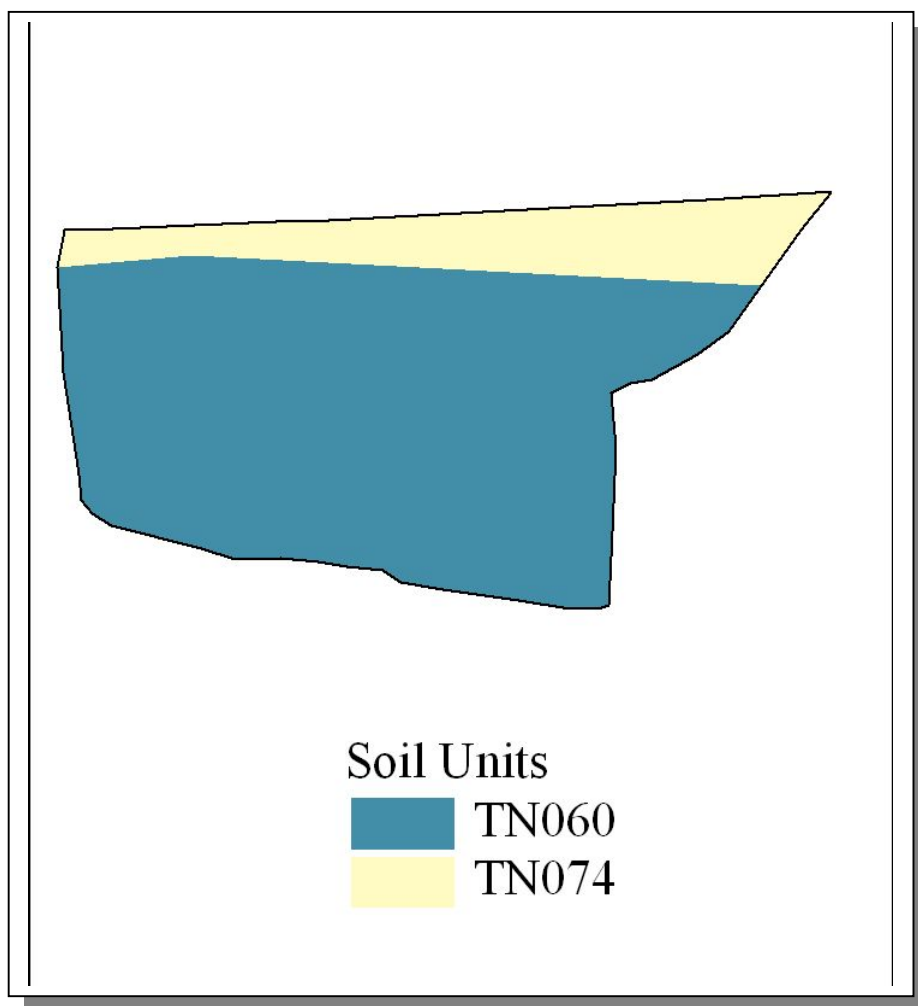


Figure 4-46. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020407.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN074	7.00	B	1.44	4.94	Loam	0.33

Table 4-39. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020407. The definition of “Hydrologic Group” is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Macon	15,906	17,854	20,386	0.29	47	52	60	27.7

Table 4-40. Population Estimates in Subwatershed 051100020407.

4.2.B.v.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.v.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Beef Cow	Cattle	Milk Cow	Hogs
42	73	<5	7

Table 4-41. Summary of Livestock Count Estimates in Subwatershed 051100020407. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Macon	15,039	26,098	318	675	2,377	111

Table 4-42. Summary of Livestock Count Estimates in Macon County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

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	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Macon				

Table 4-43. Forest Acreage and Annual Removal Rates (1987-1994) in Macon County.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.07
Grass (Pastureland)	0.43
Grass (Hayland)	0.21
Legumes (Hayland)	0.13
Legumes, Grass (Hayland)	0.14
Grass, Forbs, Legumes (Mixed Pasture)	1.03
Corn (Row Crops)	3.99
Tobacco (Row Crops)	11.12
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crops	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.16

Table 4-44. Annual Estimated Total Soil Loss in Subwatershed 051100020407.

4.2.B.vi. 051100020408 (Long Creek).

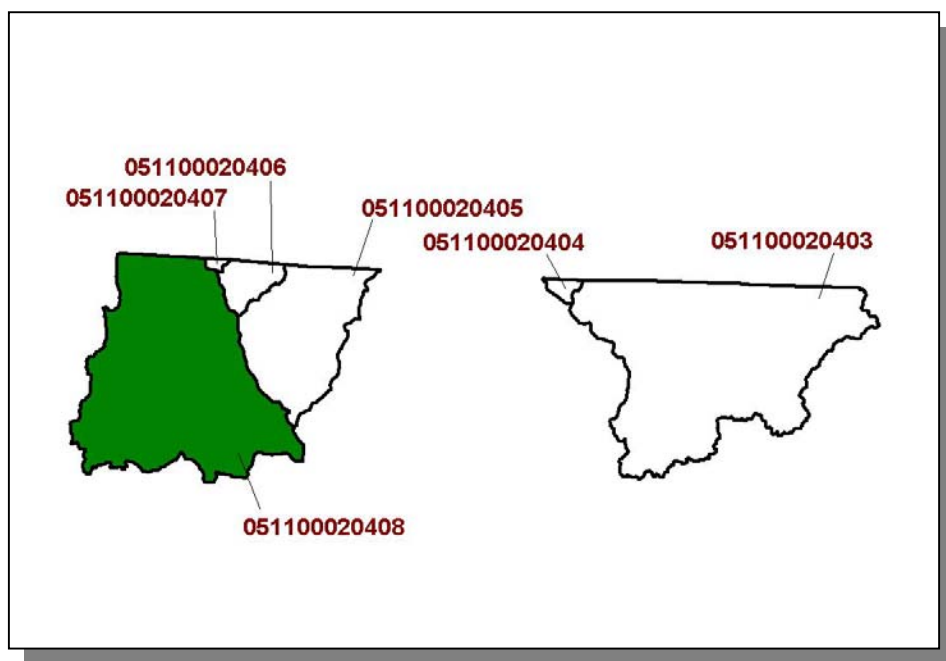


Figure 4-47. Location of Subwatershed 051100020408. All Barren River HUC-12 subwatershed boundaries are shown for reference.

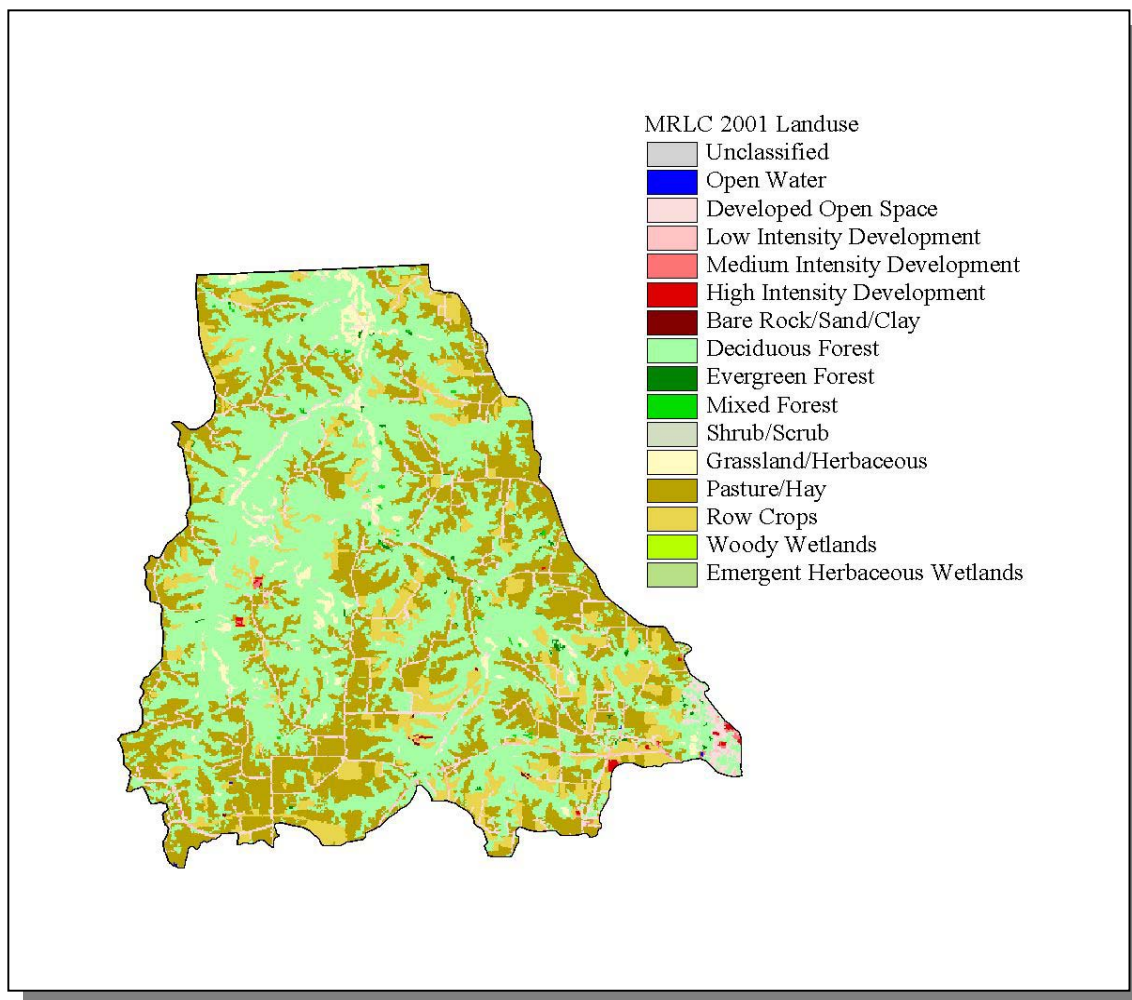


Figure 4-48. Illustration of Land Use Distribution in Subwatershed 051100020408.

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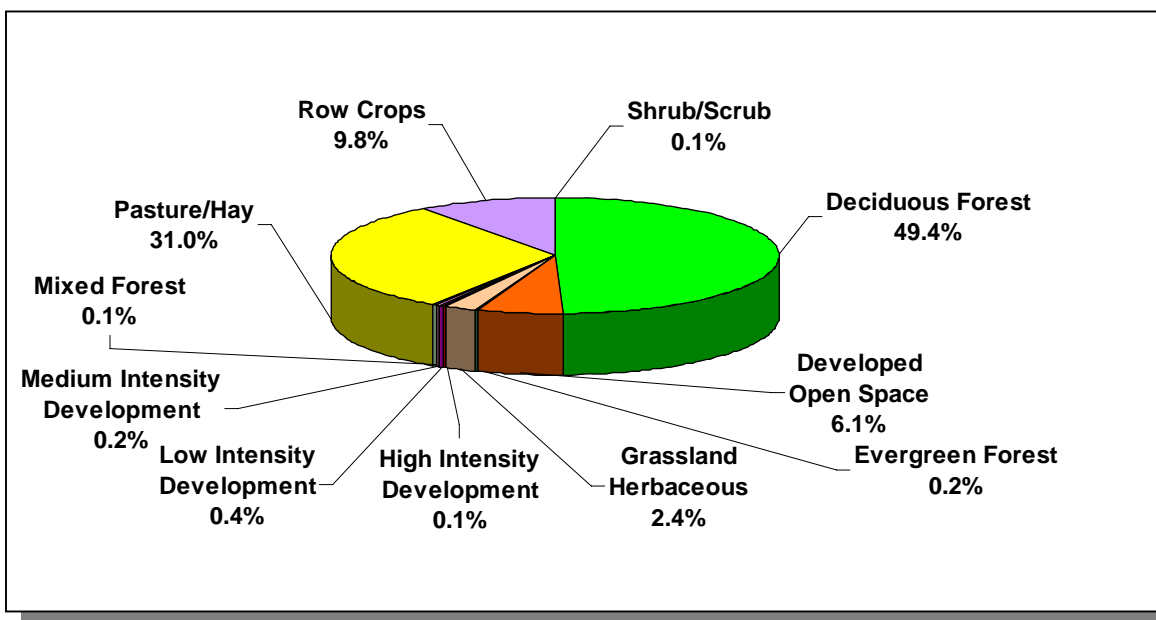


Figure 4-49. Land Use Distribution in Subwatershed 051100020408. More information is provided in Appendix IV.

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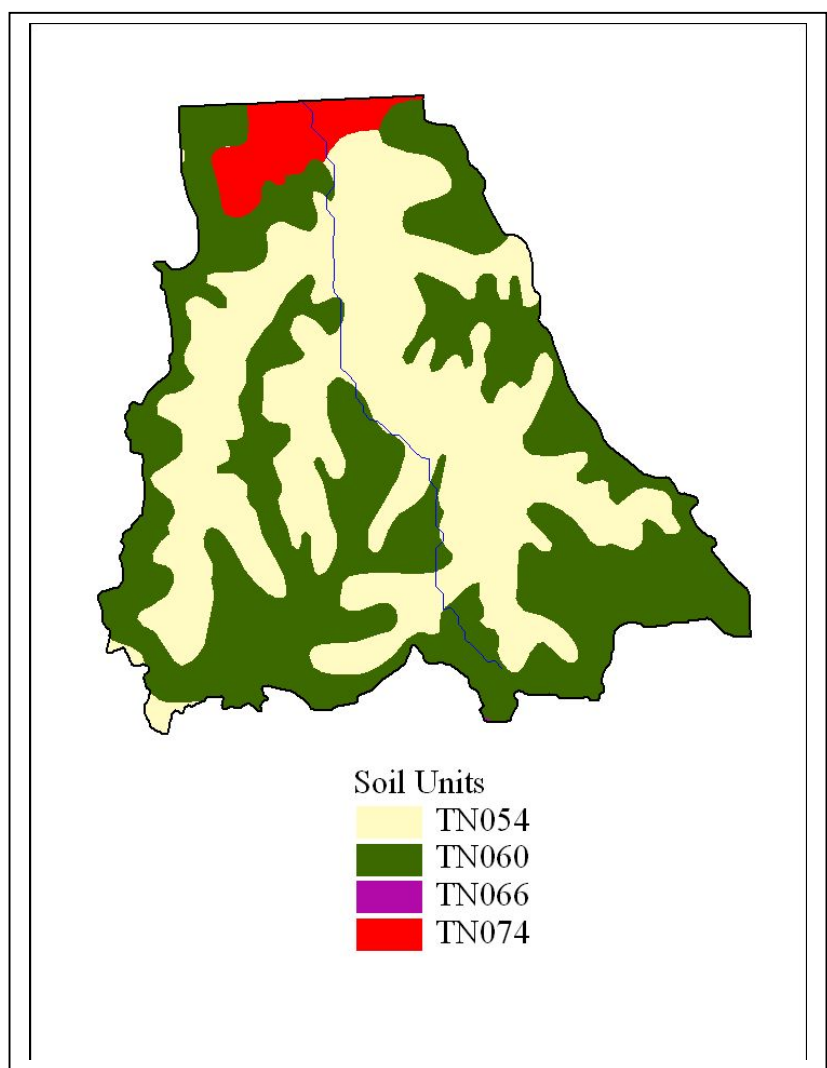


Figure 4-50 STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020408.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN066	0.00	B	2.62	4.75	Loam	0.28
TN074	7.00	B	1.44	4.94	Loam	0.33

Table 4-45. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051100020408. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Macon	15,906	17,854	20,386	15.96	2,539	2,850	3,254	28.2

Table 4-46. Population Estimates in Subwatershed 051100020408.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Lafayette	Macon	3,641	1,695	1,323	348	24

Table 4-47. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051100020408.

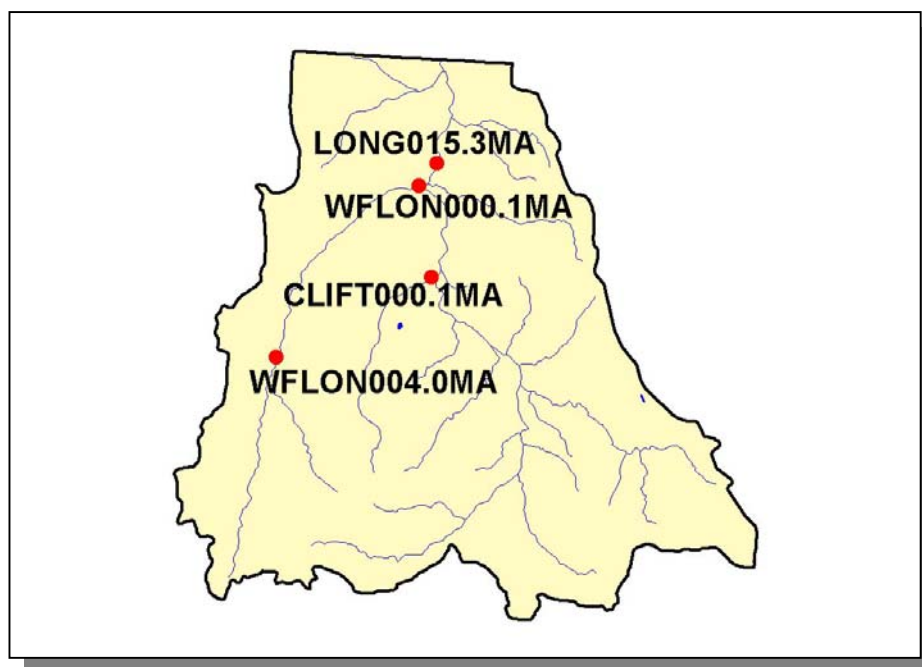


Figure 4-51. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051100020408. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.B.vi.a. Point Source Contributions.

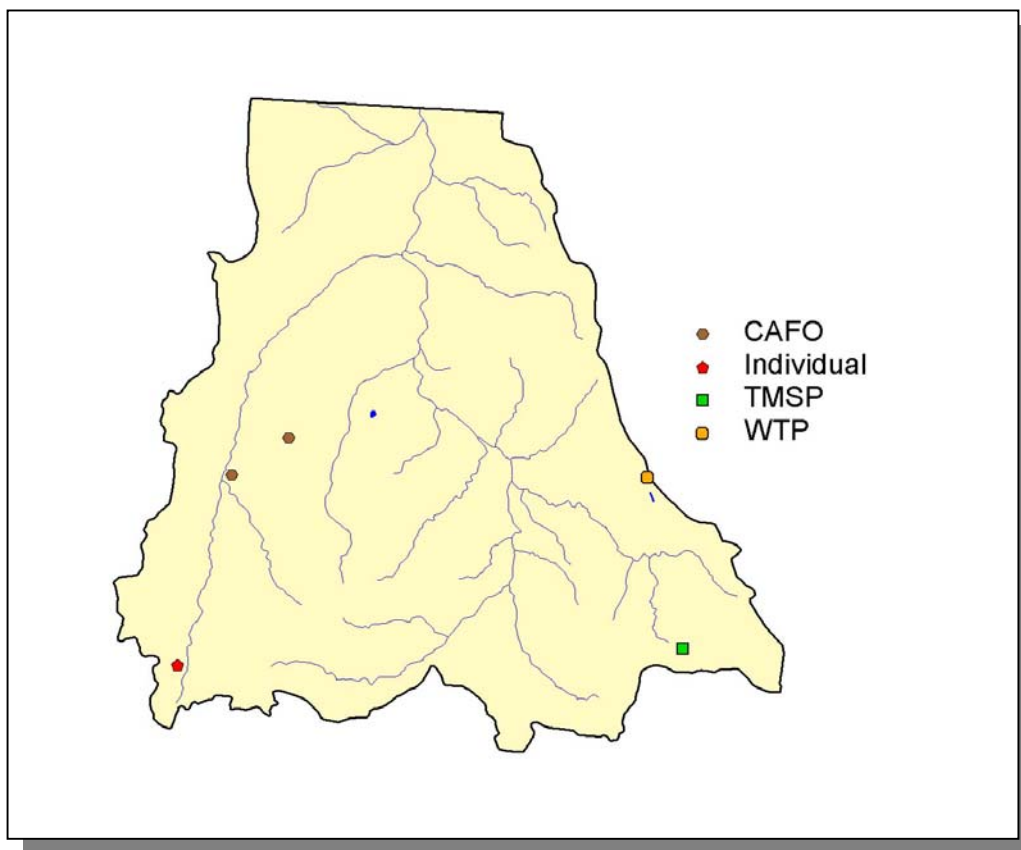


Figure 4-52. Location of Permits Issued in Subwatershed 051100020408. More information, including the names of facilities, is provided in Appendix IV.

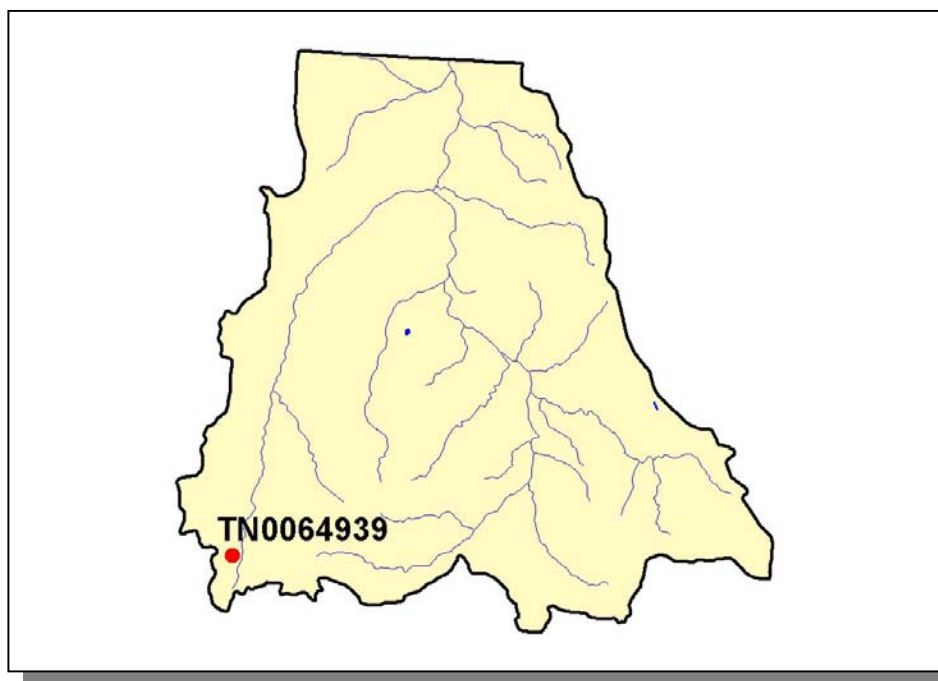


Figure 4-53. Location of Active NPDES Sites in Subwatershed 051100020408. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-54. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 051100020408. More information, including the names of facilities, is provided in Appendix IV



Figure 4-55. Location of Water Treatment Plants in Subwatershed 051100020408. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-56. Location of TMSP Sites in Subwatershed 051100020408. More information, including the names of facilities, is provided in Appendix IV.

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4.2.B.vi.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
2,608	4,526	55	6	412	19

Table 4-48. Summary of Livestock Count Estimates in Subwatershed 051100020408. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Macon	1,5039	26,098	318	675	2,377	111

Table 4-49. Summary of Livestock Count Estimates in Macon County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Macon				

Table 4-50. Forest Acreage and Annual Removal Rates (1987-1994) in Macon County.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.07
Grass (Pastureland)	0.43
Grass (Hayland)	0.21
Legumes (Hayland)	0.13
Legumes, Grass (Hayland)	0.14
Grass, Forbs, Legumes (Mixed Pasture)	1.03
Corn (Row Crops)	3.99
Tobacco (Row Crops)	11.12
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crops	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.16

Table 4-51. Annual Estimated Total Soil Loss in Subwatershed 051100020408.